NSCS
Athens, GA

NAVSUP
NAVAL SUPPLY SYSTEMS COMMAND

UNITED STATES NAVY SERIAL NUMBER TRACKING
SNT

SNT

www.snt.navsup.navy.mil

Ready. Resourceful. Responsive!

MATT MULLINS
CDR, USN
18 MAR 2004

Outline

- Background/Overview
- Implementation
  - ✓ System Access
  - ✓ AIT
- Demonstrations
- Aviation Rollout
- Military Standards
  (Product, Package, Contracts, IRRD)
- Web Site - Reports
- Future / Initiatives
- Summary

How SNT Got Started

Aviation Maintenance-Supply Readiness (AMSR) Review – 1998

Challenge:

- ↓ Lower Maintenance & Supply Cost
- ↑ Increase Readiness

System Concept

Definition:

Closed-loop, cradle-to-grave tracking of maintenance critical, serialized components, providing asset visibility and material status, and enabled by automatic identification technology (AIT)

Plan:

Collect data through interfaces with various supply and maintenance systems and provide access to stakeholders via a Virtual Shared Data Warehouse

SNT System Goals

Major Benefits

Maintenance

- Identify Maintenance Deficiencies
- Measure Reliability
- Accurate Record Configuration
- Determine Training Requirements
- Assist Engineering Investigations

Supply

- Assess Repair Turn Around Time
- Decrease Misidentification and Losses
- Warranty Management
- Predict Parts Requirements
- Better Procurement Decisions
- Measure Reliability
- Achieve Total Asset Visibility

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SNT Foundation

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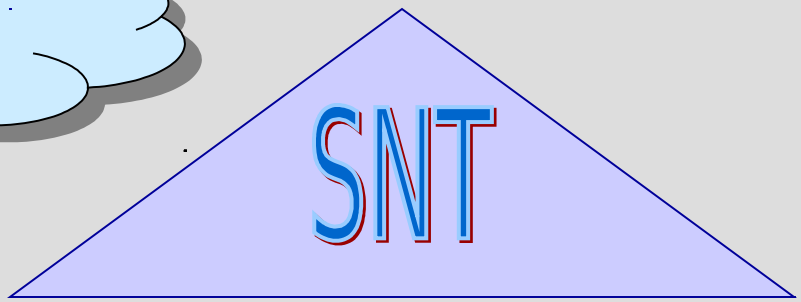
Implementation

SNT requires two components



Data Base Access
- WMRIL/A-ORS
- eRMS/WMPS
- UICP
- WEB-CAV
- CAV-ORM
- CAV-Navy
- FACTS
- OOMA/OIMA
- R-Supply
- IBS

AIT
- CMB
- 2D Data matrix
- PDF417 2D
- ISO15418/15434
- MIL-STD-129
- MIL-STD-130
- MSL
- IRRD

FIRST

Live access to databases via the SNT Web-enabled portal.

SECOND

Automatic Identification Technology (AIT) is used by SNT to maintain data accuracy.

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Aviation Asset/Information Flow

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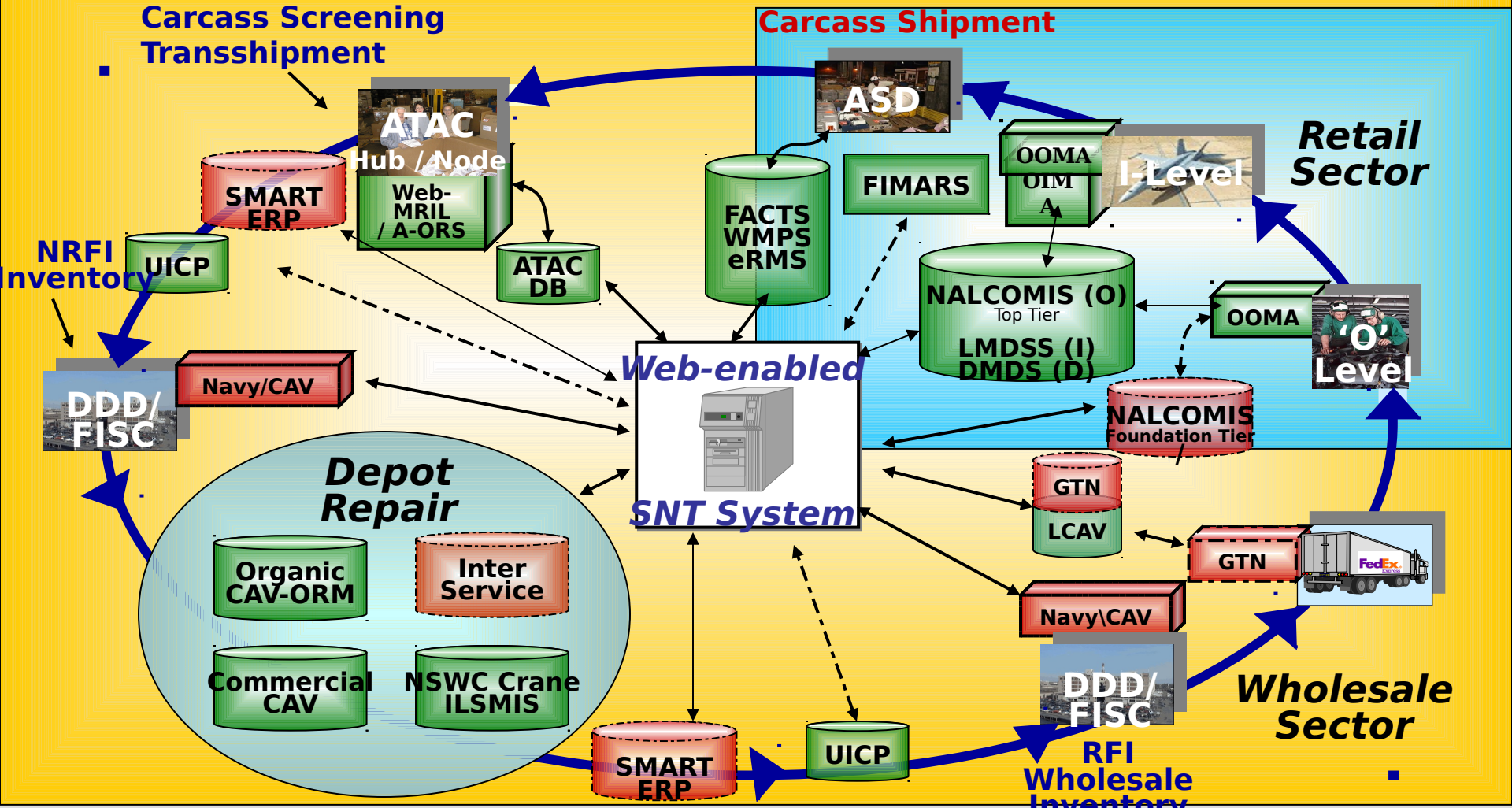
Overview

Information Systems



Connectivity | Not Connected | S/N | No S/N | Asset Flow

CMB

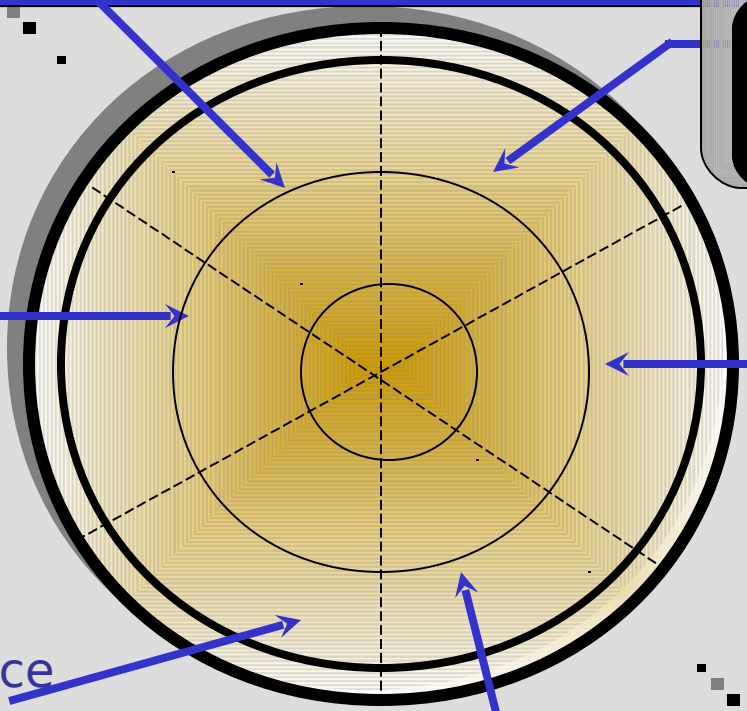
Contact Memory Button (CMB)

Scheduled Removal Component Card

Name Plate Data

Computer, Air Data CPU-175/A

P/N	50-100-01	SERNO	0152
MFR	K0656	CONTR	F33657-85C-0025



Maintenance History**

Warranty Data

CMB Stats:
- 2k,8k,32k
- ~$7-$13 each
- Read/Write
- Dual CMB/BC Reader $1200

**Use TBD within aviation maintenance

Available for Vendor Use

Available for Future Navy Use

Demonstrations

- H-60/HSL-40
- SCADC
- SQQ-32 SONAR
- HOSS Camera (AN/SXY-1)
- CAMS II A5 MODULE on SUBMARIN

Supply - Aviation 5 Year Plan

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Aviation Rollout

T/M/S	Total Number Aircraft	Components per Aircraft	Total Number of Components (W/ 25% spares)	Total CMB Cost	Contractor Installation Cost	Total Engineering Document Cost	Total AIT Cost
MH-53E	46	170	9,775	$152,783.25	$272,412.00	$136,000.00	$605,932.55
CH-53E	164	170	34,850	$544,705.50	$817,236.00	$136,000.00	$1,597,820.10
CH-53D	44	104	5,720	$89,403.60	$272,412.00	$83,200.00	$486,995.50
[illegible]H-60	342	300	128,250	$2,004,547.50	$3,268,944.00	$240,000.00	$5,665,423.90
[illegible]3B	111	400	55,500	$867,465.00	$708,271.20	$320,000.00	$1,712,510.98
E6A/B	26	469	9,380	$146,609.40	$163,447.20	$375,200.00	[illegible]
[illegible]	394	196	47,530	$742,893.90	$898,959.60	$156,800.00	$1,757,972.50
[illegible]H/UH-1N	126	132	20,790	$324,947.70	$599,306.40	$105,600.00	[illegible]
[illegible]46E	280	70	20,125	$314,553.75	$926,200.80	$56,000.00	$1,383,946.57
CH/HH-46	79	70	6,913	$108,042.38	$435,859.20	$56,000.00	$609,546.56
EA-6B	124	144	22,320	$348,861.60	$1,035,165.60	$115,200.00	$1,659,147.94
MV/CV/HV-22	458	203	116,218	$1,816,479.53	$3,922,732.80	$162,400.00	$6,254,890.39
AV-8	472	921	198,015	$3,094,974.45	$871,718.40	$736,800.00	$4,899,087.53
F-14A/B/D	193	200	48,250	$754,147.50	$871,718.40	$160,000.00	$1,940,564.86
P-3's	264	75	24,750	$386,842.50	$1,797,919.20	$60,000.00	$2,452,987.68
Cargo	295	175	64,531	$1,008,623.44	$2,724,120.00	$140,000.00	$4,297,527.69
Trainers	515	129	83,044	$1,297,973.81	$817,236.00	$103,200.00	$2,399,150.46
E-2C	75	145	13,594	$212,470.31	$1,525,507.20	$116,000.00	$1,963,874.10
C-2A	38	145	6,888	$107,651.63	$217,929.60	$116,000.00	$441,500.85
F-18ABCD	745	200	186,250	$2,911,087.50	$4,794,451.20	$160,000.00	$8,327,383.34
F-18EF	548	240	164,400	$2,569,572.00	$2,179,296.00	$192,000.00	$5,205,021.20
Misc Support							$2,805,000.00
Total			1,267,091	$19,804,636.24	$29,120,842.80	$3,726,400.00	$58,211,345.83

Total # of Items marked 1,267,091

SNT Implementation Cost = $58,211,346

Steps to Marking Parts

- Identify Parts to be Marked
- Get Approval
- Update Drawings & Technical Manuals & Directives
- Provide Configuration & ILS Support
- Establish Plan for Marking
  - Plane Side
  - Warehouse (Wholesale & Retail)
  - Amend Repair Contracts/ New Items for Supply

Package marking

Cage: 02059
PN:102770-351
Ser: 6694
NSN 7025011415888
CONT: N00104-98-T-0023
Name: Magnetic Tape
U/I: EA
QTY: 1

MIL-STD-129 PDF417
2D
ANSI MH 10

Product Marking

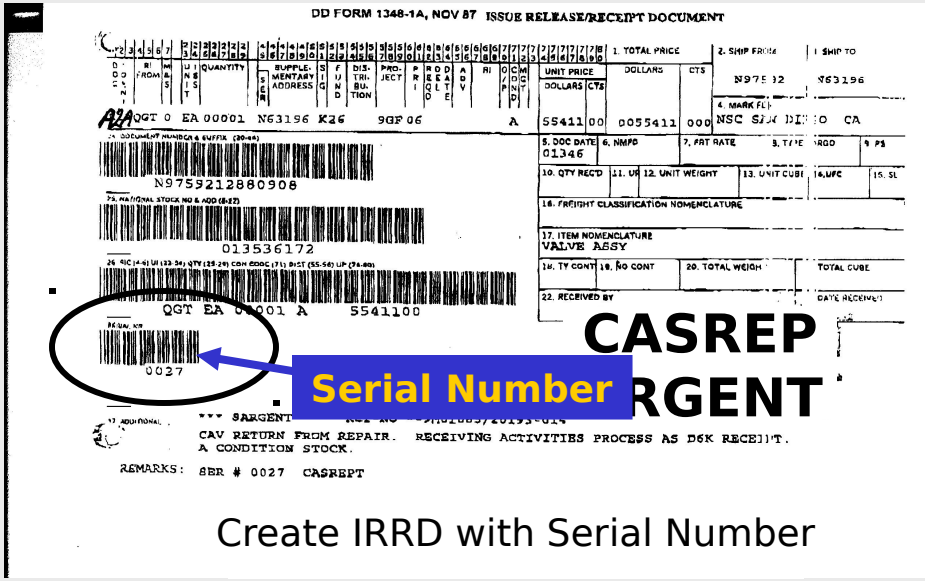
Nameplate Data

CMB

CAGE: 23456
PN: 33489-12
NSN: 5835-01-141-5888
S/N: 45367
Cont: N00383-02-G010N-0017
Name: Main Rotor Blade

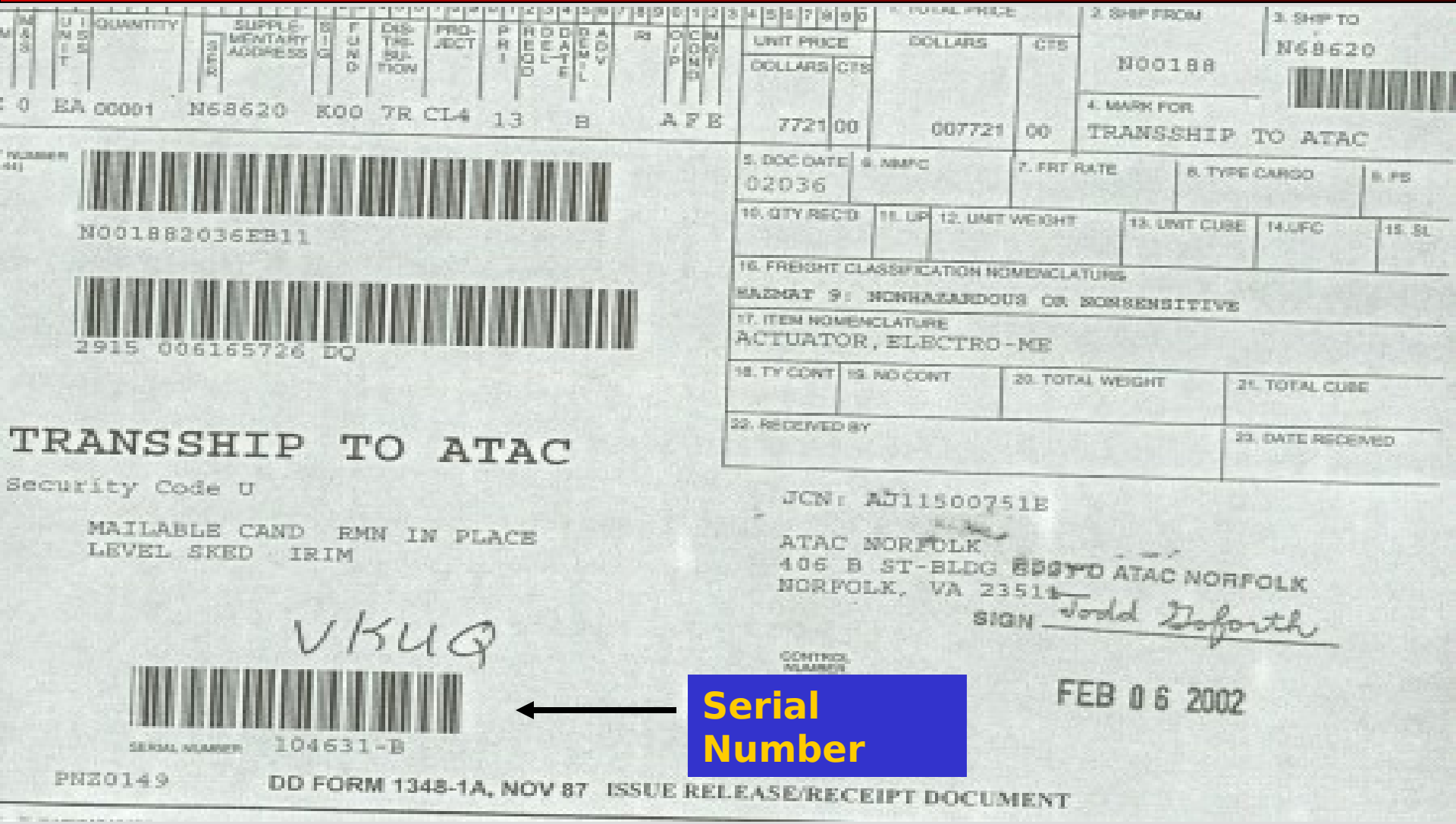
2D

Invoices



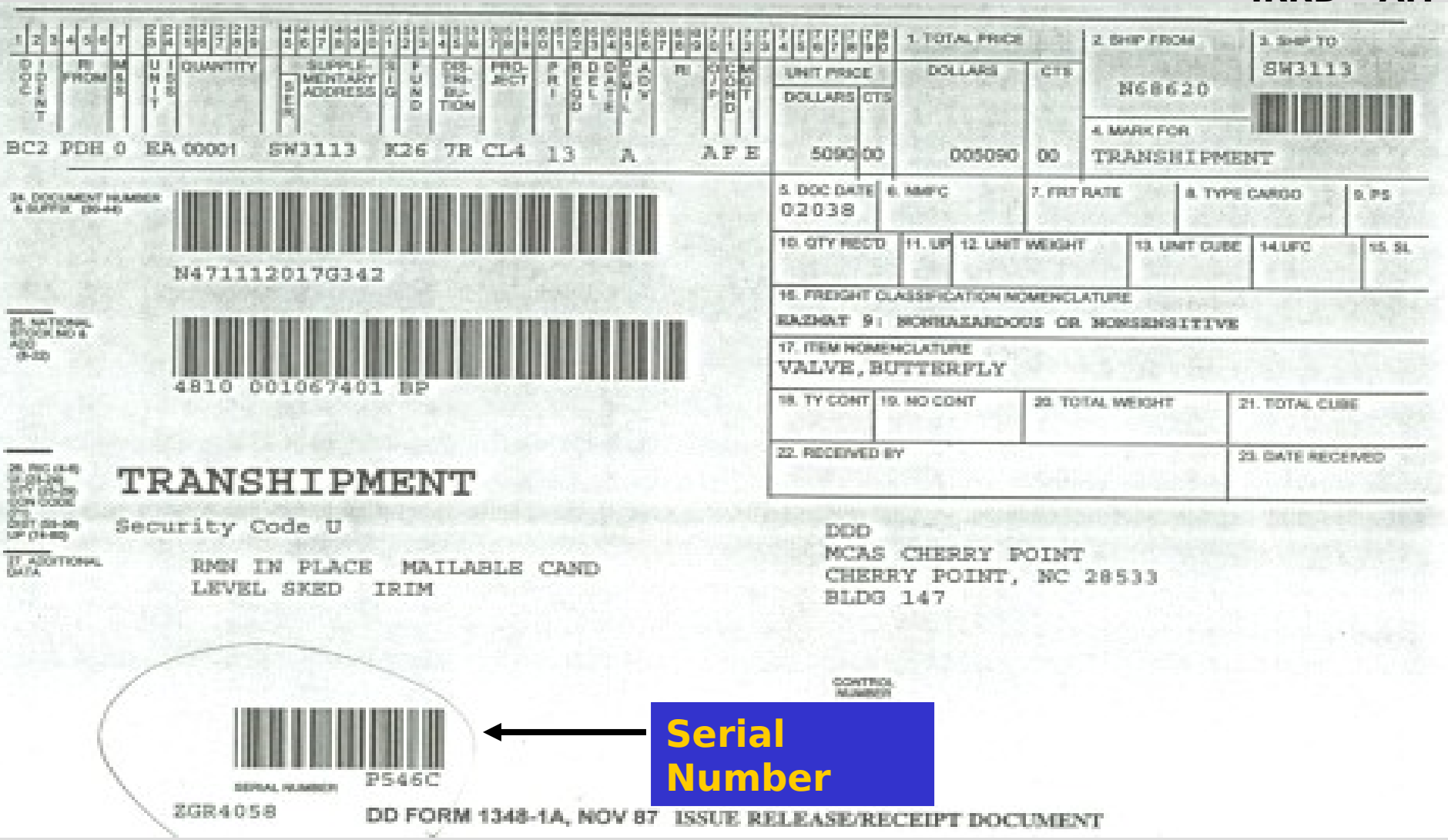
Create IRRD with Serial Number

Retrograde from Customer



Serial Number

Retrograde to DD



Serial Number

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SNT Homepage

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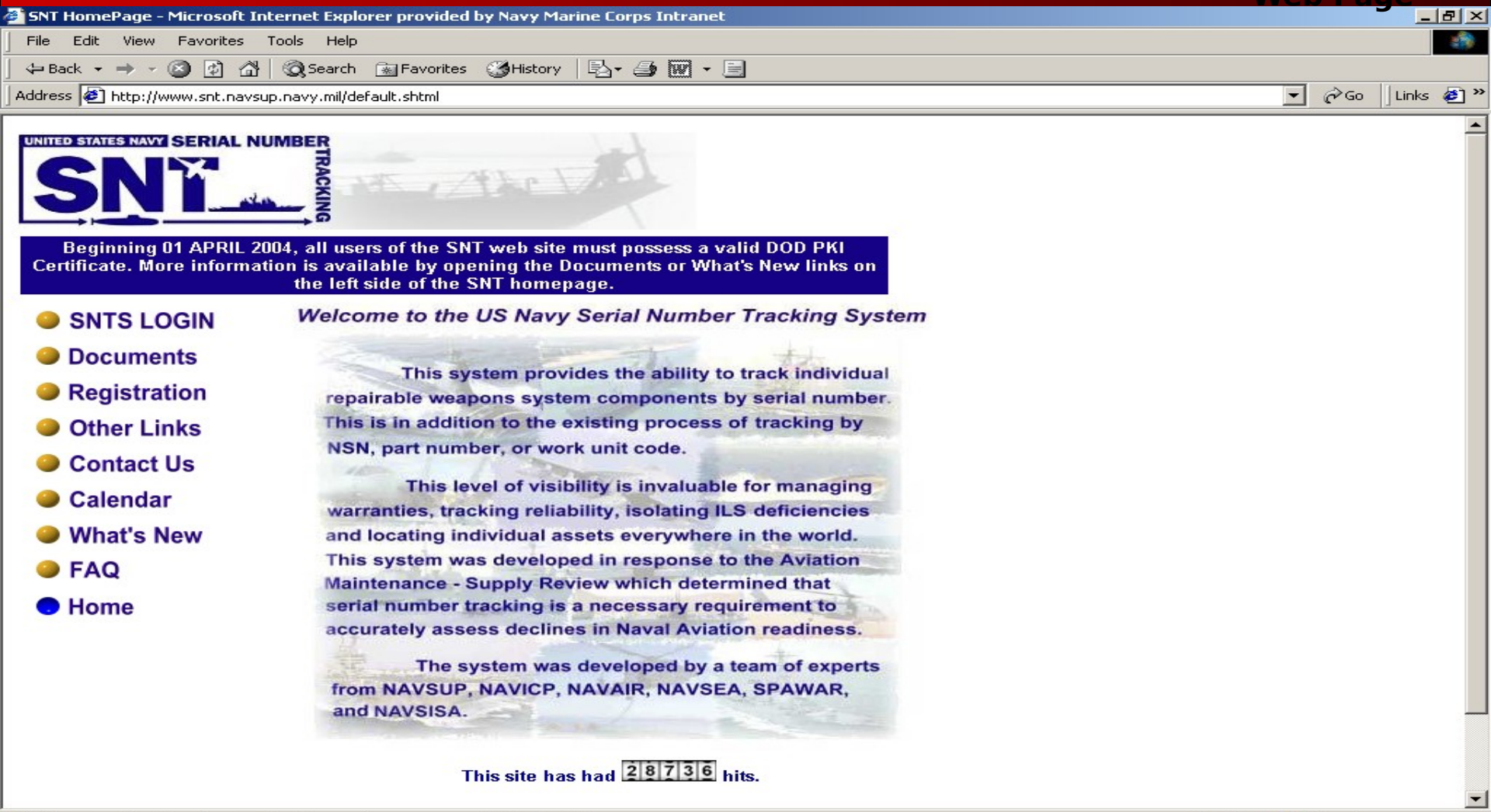
Web Page


SNT HomePage - Microsoft Internet Explorer provided by Navy Marine Corps Intranet
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://www.snt.navsup.navy.mil/default.shtml
Go Links
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Beginning 01 APRIL 2004, all users of the SNT web site must possess a valid DOD PKI Certificate. More information is available by opening the Documents or What's New links on the left side of the SNT homepage.
SNTS LOGIN
Documents
Registration
Other Links
Contact Us
Calendar
What's New
FAQ
Home
Welcome to the US Navy Serial Number Tracking System
This system provides the ability to track individual repairable weapons system components by serial number. This is in addition to the existing process of tracking by NSN, part number, or work unit code.
This level of visibility is invaluable for managing warranties, tracking reliability, isolating ILS deficiencies and locating individual assets everywhere in the world. This system was developed in response to the Aviation Maintenance - Supply Review which determined that serial number tracking is a necessary requirement to accurately assess declines in Naval Aviation readiness.
The system was developed by a team of experts from NAVSUP, NAVICP, NAVAIR, NAVSEA, SPAWAR, and NAVSISA.
This site has had 28736 hits.
(1 item remaining) Opening page http://www.snt.navsup.n
Internet
Start
Inbox - Microsoft Outlook
Microsoft
14:51

www.snt.navsup.navy.mil

SNT Web Page Query Results

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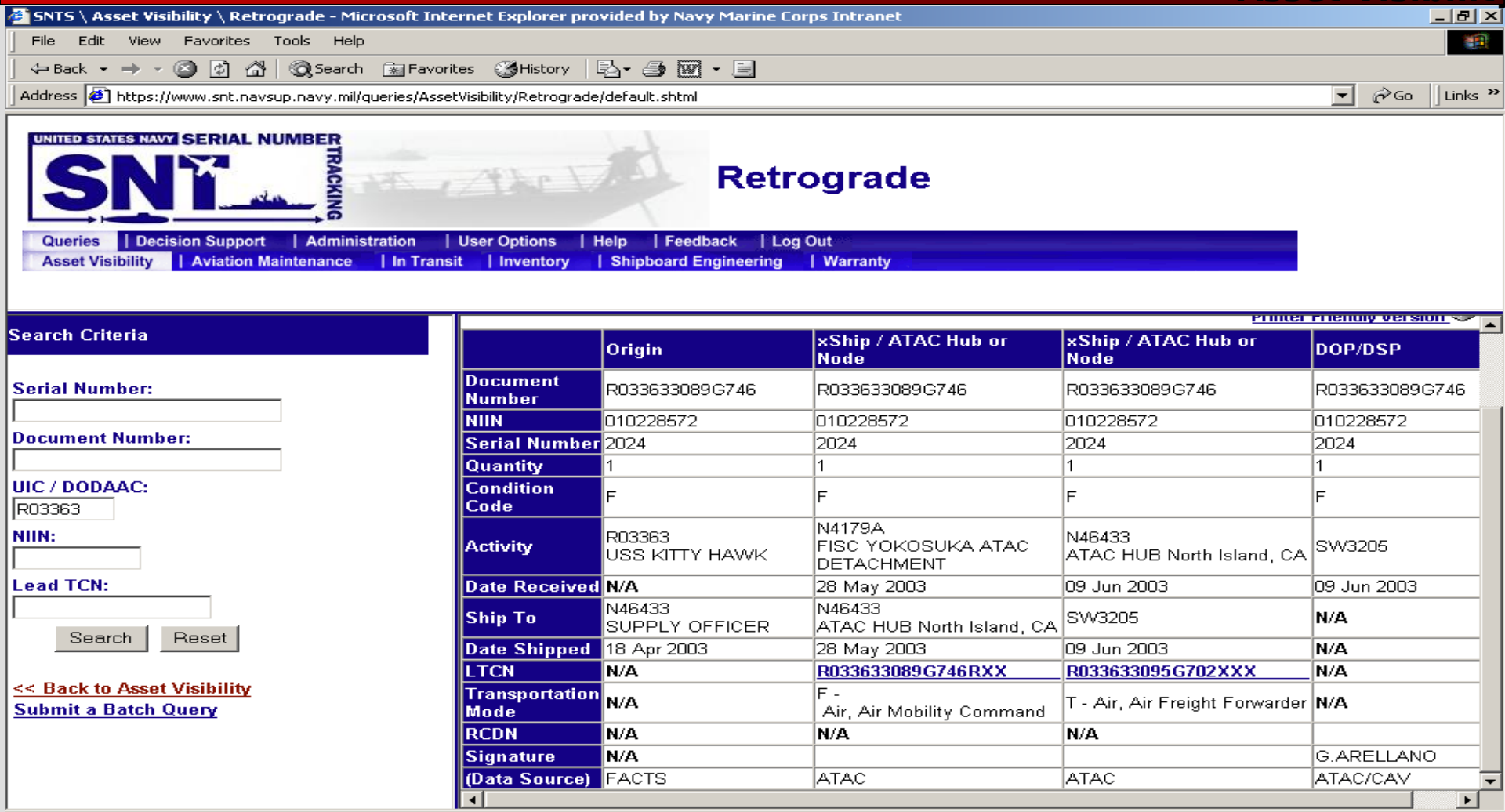
Asset Visibility


SNTS \ Asset Visibility \ Retrograde - Microsoft Internet Explorer provided by Navy Marine Corps Intranet
File Edit View Favorites Tools Help
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Go Links
UNITED STATES NAVY SERIAL NUMBER TRACKING SNT
Retrograde
Queries | Decision Support | Administration | User Options | Help | Feedback | Log Out
Asset Visibility | Aviation Maintenance | In Transit | Inventory | Shipboard Engineering | Warranty
Search Criteria
Serial Number:
Document Number:
UIC / DODAAC:
R03363
NIIN:
Lead TCN:
Search
Reset
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Submit a Batch Query
Printer Friendly Version
Internet
Start
ICP Mech - Micro...
\\naeamechfs01v...
SNTS \ Asset Vi...
Document1 - Micr...
10:42

	Origin	xShip / ATAC Hub or Node	xShip / ATAC Hub or Node	DOP/DSP
Document Number	R033633089G746	R033633089G746	R033633089G746	R033633089G746
NIIN	010228572	010228572	010228572	010228572
Serial Number	2024	2024	2024	2024
Quantity	1	1	1	1
Condition Code	F	F	F	F
Activity	R03363 USS KITTY HAWK	N4179A FISC YOKOSUKA ATAC DETACHMENT	N46433 ATAC HUB North Island, CA	SW3205
Date Received	N/A	28 May 2003	09 Jun 2003	09 Jun 2003
Ship To	N46433 SUPPLY OFFICER	N46433 ATAC HUB North Island, CA	SW3205	N/A
Date Shipped	18 Apr 2003	28 May 2003	09 Jun 2003	N/A
LTCN	N/A	R033633089G746RXX	R033633095G702XXX	N/A
Transportation Mode	N/A	F - Air, Air Mobility Command	T - Air, Air Freight Forwarder	N/A
RCDN	N/A	N/A	N/A	
Signature	N/A			G.ARELLANO
(Data Source)	FACTS	ATAC	ATAC	ATAC/CAV

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Reliability

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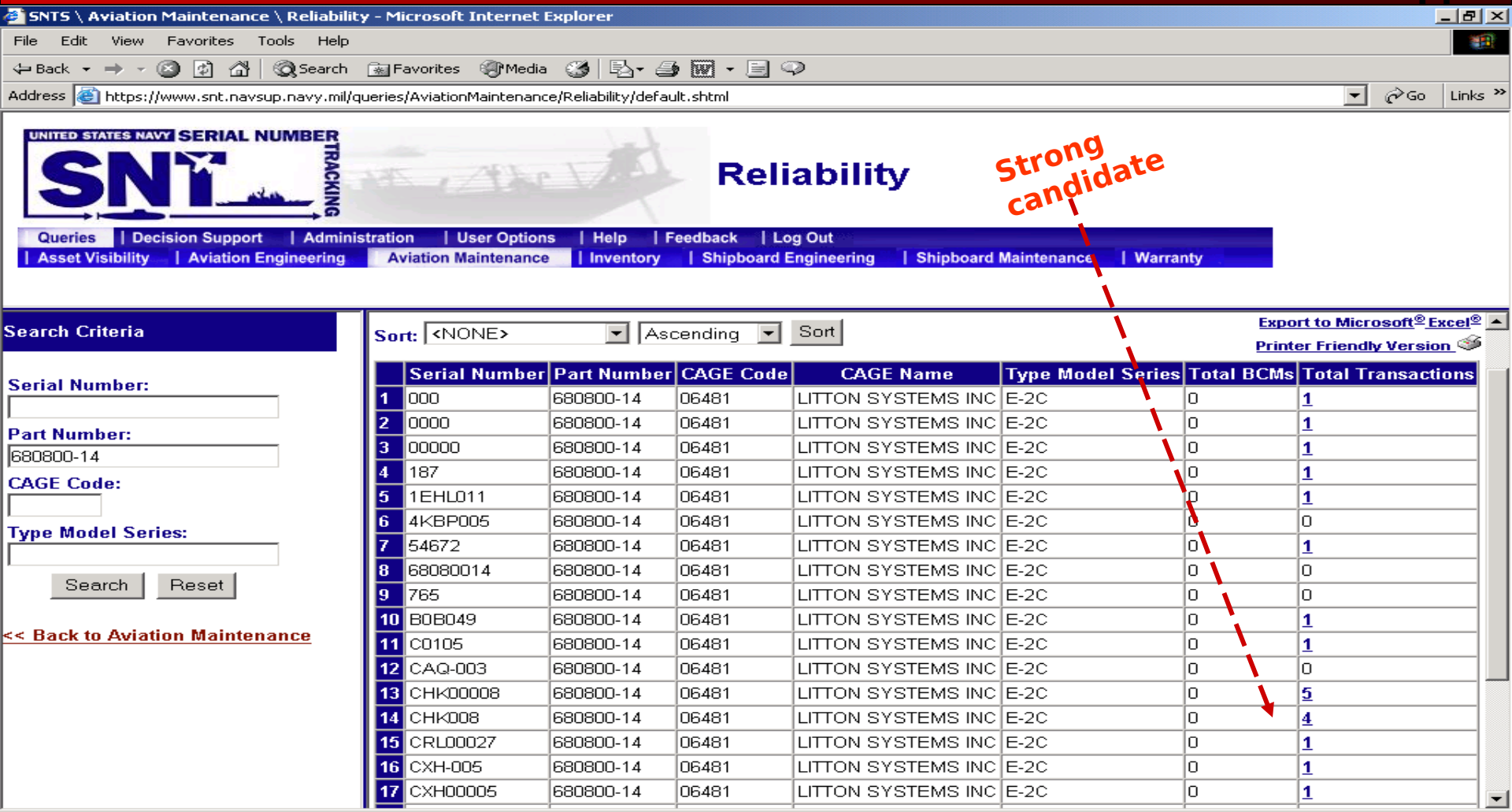
Decision Support



	Serial Number	Part Number	CAGE Code	CAGE Name	Type Model Series	Total BCMs	Total Transactions
1	000	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
2	0000	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
3	00000	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
4	187	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
5	1EHL011	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
6	4KBP005	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	0
7	54672	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
8	68080014	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	0
9	765	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	0
10	B0B049	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
11	C0105	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
12	CAQ-003	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	0
13	CHK00008	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	5
14	CHK008	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	4
15	CRL00027	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
16	CXH-005	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1
17	CXH00005	680800-14	06481	LITTON SYSTEMS INC	E-2C	0	1

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SNT Web Page Query Results

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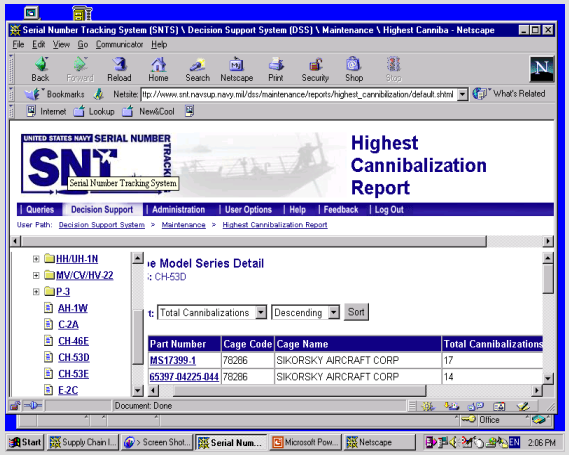
Decision Support

Generate, Collect & Analyze Maintenance Data

SNT Existing Reports



Additional Reports – Top Cost Driver, Top Degraders

Carcass Tracking Watch

NAVAL SUPPLY SYSTEMS COMMAND

Serial Number Tracking System (SNTS) \ Decision Support Module (DSM) \ Retrograde \ Carcass Tra - Microsoft Internet Explorer p
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://www.snt.navsup.navy.mil/dss/retrograde/carcass_tracking/add_watch_form.shtml?action=add_form&watch_type=1
Go Links
UNITED STATES NAVY SERIAL NUMBER TRACKING SNT
Carcass Tracking Watches
Queries | Decision Support | Administration | User Options | Help | Feedback | Log Out
User Path: Decision Support Module > Retrograde > Carcass Tracking
Add New Carcass Watch
Document Number
R03363 - 3072 - G660 -
Timeframe:
Past 90 days
Email Notifications
Email Notifications will be sent to pamela.szymczak@navy.mil. Do you wish to receive Email Notifications for this Carcass Watch?
Yes
No
Add Cancel
Internet
Start
Inbox - Microsoft ...
Serial Number T...
Pitches
Microsoft Excel - 7...
Microsoft PowerP...
10:53

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Carcass Watch Notification

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Dear _____
This is an email notifying you of the status of your Carcass Watches:
Document Number: N00188-3155-GC23
NIIN: 008773277
Serial Number: 16740
Condition Code: F
Quantity: 0
Shipped From: N00188 - NAVAL AIR STATION OCEANA
Date Shipped:
LTCN:
Transportation Mode: -
Ship To: N68620 - ATAC HUB Norfolk, VA
Date Received:

NIIN: 008773277
Serial Number: 16740
Condition Code: F
Quantity: 1
Shipped From: N68620 - ATAC HUB Norfolk, VA
Date Shipped:
LTCN: N001883155GC23XXX
Transportation Mode: T - Air, Air Freight Forwarder
Ship To: SW3142
Date Received: 2003-06-05

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Wholesale System Reporting S/N

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Future

Coming Soon
DSS Reports SN of Selected Items For Receipts/ Issues

Web-enabled

SNT System

SNT WEB Site Accesses Navy Repository

DDNV 12/8/02– 3/3/03
DDDC/DDCN 1/12/03 – 3/3/03

Receipts	W/ SN	W/O SN
DDNV	6	22
DDDC	193	112
DDCN	493	201
Issues		
DDNV	15	9
DDDC	95	164
DDCN	470	314

Navy Repository

Maritime Focus

DATA BASE ACCESS:

- **CDMD-0A**
  - ✓ Display Shipboard Configuration Data
- **LCAV**
  - ✓ In Transit Query

INITIATIVES:

- GPETE Working with NAVSEA Code 04L52
- Ship Configuration Validation – Working with NAVSEA Code 04L51
- Rapid Securing Device (RSD)
- AN/UYQ-70
- AEGIS Tubes
- MK92 TWT
- BARCO ATDC monitors and COHU cameras (Tomahawk).
- Digital Modular Radio System

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SIM / SNT Parallel Goals

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UNITED STATES NAVY SERIAL NUMBER TRACKING SNT

Summary

DRID 54

- *Optimize Logistics Processes to Minimize Customer Wait Time (CWT) using Variance Based Metrics* — FY02
- Customer Confidence In a Simplified Priority System With Time Definite Delivery — FY02
- ***Total Asset Visibility Through Use of AIT, Shared Data Environment and Other Applications*** — FY04
- ***Real-Time, Actionable, Web-Based Logistics Information Systems*** — FY04

Complements

- SUPER REG
- SIM Directive
- ADC 44 & 89
- DoD 5000.2 Acq Policy of 12 May 03
- DoD UID Policy – 29 JUL 03
- RFID Directive – 02 OCT 03
- UITC – Navy 1st w/AAD UIDC
- MIL-STD-129, 130

Navy Enterprise Team Ships

Supply Maintenance Aviation Reengineering Team SMART ERP NAVSUP ★ NAVAIR

Summary

- SNT Project well underway
- SNTS Web Application on line – accessing live data
  - ✓ Decision Support and Reliability Modules
- Prototypes completed - proven concept
- Complying with DoD directives
- SNT is a part of (and complements) TAV

Shipboard Asset/Information Flow

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